Interview Summary

1.   A proposed amendment was submitted for applicant's consideration. Examiner

suggested the Applicant to amend claims as shown in the Examiner's Amendment

below in order to place the application in condition for allowance.

Examiner's Amendment

2.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

3.   Authorization for this Examiner's Amendment was given in a telephone interview

with the Applicant's Representative, Mr. Tan-Chi Yuan (Limited Recognition No. L0113),

on February 13th, 2008.

4.   Please amend the claims and the specification as below:

Amendments to the Claims

        This listing of claims will replace all prior versions, and listings, of claims in the

application:

Claim 1 (currently amended): A method of managing a web service provided by a plurality of servers coupled to a data communication network, at least one of said servers executing a first version of the web service, said method comprising:

executing a second version of the web service on a first server coupled to the data communication network, wherein the first server also includes the first version of the web service executed thereon;

identifying a selected version of the web service based on a request from a user to access the web service via the data communication network;

generating a first data stream associated with the user in response to the request, said generated first data stream includes at least one of the following: default data and version data, said default data specifying a default version of the web service associated with the first server, said version data identifying a latest version of the web service accessed by the user,

wherein the identifying the selected version of the web service comprises processing the first data stream, said processing the first data stream includes identifying the second version of the web service as the selected version if the version data identifies the second version as the latest version of the web service accessed by the user and the default data specifies the first version as the default version of the web service; and

providing the user access to the identified selected version of the web service associated with the first server via a client also coupled to the data communication network.

Claim 2 (canceled).

Claim 3 (original): The method of claim 1 further comprising updating the first version of the web service executed on a second server coupled to the data communication network with the second version of the web service while the user is provided access to the identified selected version of the web service by the first server.

Claim 4 (original): The method of claim 1, wherein the first version corresponds to an older version of the web service and the second version corresponds to a newer version of the web service.

Claim 5 (canceled).

Claim 6 (currently amended): The method of claim [[5]] 1, ~~wherein the first data stream includes default data, said default data specifying a default version of the web service associated with the first server, and~~ wherein the processing the first data stream includes executing a filtering routine in response to the generated first data stream to identify the default version of the web service as the selected version of the web service.

Claim 7 (canceled).

Claim 8 (currently amended): The method of claim [[6]] 1, wherein the default data specifies the second version of the web service as the default version after executing the second version on the first server.

Claim 9 (original): The method of claim 8 further including specifying the first version of the web service as the default version if the second version of the web service is not stabilized on the first server, and wherein identifying the selected version includes identifying the first version of the web service as the selected version irrespective of a latest version of the web service accessed by the user or a version of the web service registered by the user.

Claim 10 (original): The method of claim 8 further including removing the first version of the web service from the first server if the second version of the web service is stabilized on the first server.

Claim 11 (currently amended): The method of claim [[6]] 1, wherein processing the first data stream includes:

receiving the first data stream at an authentication service executed by a second server, said second server also being coupled to the data communication network; and

providing a web form to the user via the data communication network in response to the first data stream being received by the authentication service, said web form

providing an interface for receiving a second data stream from the user, said second data stream including authentication data corresponding to the user.

Claim 12 (original): The method of claim 11 further comprising:

authenticating the user, by the authentication service, based on the second data stream; and

providing the authenticated user access to the selected version of the web service.

Claim 13 (original): The method of claim 12 further including storing version data in a database, said version data identifying a version of the web service registered by the user, wherein authenticating the user includes retrieving version data identifying a version of the web service registered by the user, and wherein identifying the selected version further includes identifying the second version of the web service as the selected version if the retrieved version data identifies the second version as the version of the web service registered by the user and the default data specifies the first version as the default version of the web service.

Claim 14 (original): The method of claim 11, wherein the authentication data includes at least a valid user login identifier and a valid user password.

Claim 15 (currently amended): One or more computer readable <u>storage</u> media having computer-executable instructions <u>stored thereon</u> for performing the method of claim 1.

Claim 16 (currently amended): A system to manage a web service provided by a plurality of servers coupled to a data communication network, at least one of said servers executing a ~~fist~~ <u>first</u> version of the web service, comprising:

a first server coupled to the data communication network, said first server adapted to have a second version of the web service executed thereon<u>, wherein the first server also includes the first version of the web service executed thereon</u>;

<u>a computer-readable storage medium associated with the first server having</u> computer-executable instructions <u>stored thereon t</u>o identify a selected one of the versions of the web service based on a request from a user to access the web service via the data communication network;

<u>a computer-readable storage medium associated with the first server having computer-executable instructions stored thereon to generate a first data stream associated with the user in response to the request, said generated first data stream includes at least one of the following: default data and version data, said default data specifying a default version of the web service associated with the first server, said version data identifying a latest version of the web service accessed by the user,</u>

<u>wherein the identifying comprises processing the first data stream, said processing the first data stream includes identifying the second version of the web</u>

service as the selected version if the version data identifies the second version as the latest version of the web service accessed by the user and the default data specifies the first version as the default version of the web service; and

a computer-readable storage medium associated with the first server having computer-executable instructions stored thereon to provide the user access to the identified selected version of the web service associated with the first server via a client also coupled to the data communication network.

Claim 17 (canceled).

Claim 18 (original):   The system of claim 16 further comprising a second server also coupled to the data communication network, said second server adapted to have at least the first version of the web service executed thereon, further comprising computer-executable instructions to update the first version of the web service executed on the second server with the second version of the web service while the user is provided access to the identified selected version of the web service by the first server.

Claim 19 (original):   The system of claim 16, wherein the first version corresponds to an older version of the web service and the second version corresponds to a newer version of the web service.

Claim 20 (canceled).

Claim 21 (currently amended): The system of claim [[20]] 16, ~~wherein the first data stream is adapted to include default data, said default data adapted to specify a default version of the web service associated with the first server, and~~ further comprising a filtering routine executed in response to the generated first data stream to identify the default version of the web service as the selected version of the web service.

Claim 22 (canceled).

Claim 23 (currently amended): The system of claim [[21]] 16, wherein the default data is adapted to specify the second version of the web service as the default version after executing the second version on the first server.

Claim 24 (original): The system of claim 23 further comprising computer-executable instructions to specify the first version of the web service as the default version if the second version of the web service is not stabilized on the first server, and wherein the first version of the web service is identified as the selected version irrespective of a latest version of the web service accessed by the user or a version of the web service registered by the user.

Claim 25 (original): The system of claim 23 further comprising computer-executable instructions to remove the first version of the web service from the first server if the second version of the web service is stabilized on the first server.

Claim 26 (currently amended): The system of claim [[21]] 16 further comprising a second server also coupled to the data communication network, said second server adapted to execute an authentication service, said authentication service responsive to the first data stream to provide a web form to the user via the data communication network, said web form adapted to provide an interface to receive a second data stream from the user, said second data stream adapted to include authentication data corresponding to the user.

Claim 27 (original): The system of claim 26 further comprising computer-executable instructions to:

authenticate the user, by the authentication service, based on the second data stream; and

provide the authenticated user access to the selected version of the web service.

Claim 28 (original): The system of claim 27 further comprising a database associated with the second server, said database adapted to store version data, said version data adapted to identify a version of the web service registered by the user, and wherein the second version of the web service is identified as the selected version if the

version data retrieved from the database identifies the second version as the version of

the web service registered by the user and the default data specifies the first version as

the default version of the web service.

Claim 29 (original): The system of claim 26, wherein the authentication data is

adapted to include at least a valid user login identifier and a valid user password.

Claim 30 (currently amended): A computer-readable storage medium having

computer-executable instructions stored thereon for performing a method to manage a

web service provided by a plurality of servers coupled to a data communication network,

at least one of said servers executing a first version of the web service, said method

comprising:

executing a second version of the web service on a first server coupled to the

data communication network, wherein the first server also includes the first version of

the web service executed thereon;

processing a request from a user to access the web service via the data

communication network to identify a selected version of the web service;

generating a first data stream associated with the user in response to the

request, said generated first data stream includes at least one of the following: default

data and version data, said default data specifying a default version of the web service

associated with the first server, said version data identifying a latest version of the web

service accessed by the user,

wherein the processing comprises processing the first data stream, said processing the first data stream includes identifying the second version of the web service as the selected version if the version data identifies the second version as the latest version of the web service accessed by the user and the default data specifies the first version as the default version of the web service; and

providing the user access to the identified selected version of the web service associated with the first server via a client also coupled to the data communication network.

Claim 31 (canceled).

Claim 32 (currently amended):   The computer-readable storage medium of claim 30, wherein the method further comprises updating the first version of the web service executed on a second server coupled to the data communication network with the second version of the web service while the user is provided access to the identified selected version of the web service by the first server.

Claim 33 (currently amended):   The computer-readable storage medium of claim 30, wherein the first version corresponds to an older version of the web service and the second version corresponds to a newer version of the web service.

Claim 34 (canceled).

Claim 35 (currently amended): The computer-readable <u>storage</u> medium of claim [[34]] <u>30</u>, ~~wherein the first data stream includes default data, said default data specifying a default version of the web service associated with the first server, and~~ wherein said processing the request further comprises filtering the generated first data stream to identify the default version of the web service as the selected version of the web service.

Claim 36 (canceled).

Claim 37 (currently amended): The computer-readable <u>storage</u> medium of claim [[35]] <u>30</u>, wherein the default data specifies the second version of the web service as the default version after executing the second version on the first server.

Claim 38 (currently amended): The computer-readable <u>storage</u> medium of claim 37, wherein the method further comprises specifying the first version of the web service as the default version if the second version of the web service is not stabilized on the first server, and wherein said processing the request further comprises identifying the first version of the web service as the selected version irrespective of a latest version of the web service accessed by the user or a version of the web service registered by the user.

Claim 39 (currently amended):   The computer-readable storage medium of claim 37, wherein the method further comprises removing the first version of the web service from the first server if the second version of the web service is stabilized on the first server.

Claim 40 (currently amended): The computer-readable storage medium of claim [[35]] 30 further comprising processing the first data stream for:

receiving the first data stream at an authentication service executed by a second server, said second server also being coupled to the data communication network; and

providing a web form to the user via the data communication network in response to the first data stream being received by the authentication service, said web form providing an interface for receiving a second data stream from the user, said second data stream including authentication data corresponding to the user.

Claim 41 (currently amended):   The computer-readable storage medium of claim 40, wherein the method further comprises:

authenticating the user, by the authentication service, based on the second data stream; and

providing the authenticated user access to the selected version of the web service.

Claim 42 (currently amended):   The computer-readable storage medium of

claim 41, wherein the method further comprises storing version data in a database, said

version data identifying a version of the web service registered by the user, wherein

authenticating the user includes retrieving version data identifying a version of the web

service registered by the user, and wherein processing the request further includes

identifying the second version of the web service as the selected version if the retrieved

version data identifies the second version as the version of the web service registered

by the user and the default data specifies the first version as the default version of the

web service.

Claim 43 (currently amended):   The computer-readable storage medium of

claim 40, wherein the authentication data includes at least a valid user login identifier

and a valid user password.

Claim 44 (currently amended): A computer-readable storage medium having

computer-executable components stored thereon for managing a web service provided

by a plurality of servers coupled to a data communication network, at least one of said

servers executing a first version of the web service, said computer-readable storage

medium comprising:

an update component for executing a second version of the web service on a first

server coupled to the data communication network, wherein the first server also

includes the first version of the web service executed thereon;

a processing component for processing a request from a user to access the web service via the data communication network to identify a selected version of the web service;

wherein the processing component is configured to generate a first data stream associated with the user in response to the request, said generated first data stream includes at least one of the following: default data and version data, said default data specifying a default version of the web service associated with the first server, said version data identifying a latest version of the web service accessed by the user,

wherein the processing component is further configured to process the first data stream, said processing the first data stream includes identifying the second version of the web service as the selected version if the version data identifies the second version as the latest version of the web service accessed by the user and the default data specifies the first version as the default version of the web service; and

a providing component for providing the user access to the identified selected version of the web service associated with the first server via a client also coupled to the data communication network.

Claim 45 (canceled).

Claim 46 (new): The computer-readable storage medium of claim 44, wherein the processing component is further configured to filter the generated first data stream

to identify the default version of the web service as the selected version of the web service.

Amendments to the Specification

Please replace paragraph [0010] with the following amended paragraph:

[0010] In another embodiment of the invention, a system employing aspects of the invention is adapted to manage a web service provided by a plurality of servers coupled to a data communication network. At least one of the servers executes a ~~fist~~ first version of the web service. The system includes a first server coupled to the data communication network. The first server is adapted to have a second version of the web service executed thereon. The system also includes computer-executable instructions to identify a selected one of the versions of the web service based on a request from the user to access the web service via the data communication network. The system further includes computer-executable instructions to provide the user access to the identified selected version of the web service via a client also coupled to the data communication network.

5.   Pursuant to MPEP 606.01, the title has been changed to read:

-- METHOD AND SYSTEM FOR STAGED WEB SERVICE UPGRADE FROM AN EXISTING VERSION TO A DIFFERENT VERSION --

6.   Claims 1, 3, 4, 6, 8-16, 18, 19, 21, 23-30, 32, 33, 35, 37-44 and 46 are allowed.

7.   The following is an examiner's statement of reasons for allowance:

        In interpreting the currently amended claims in light of the specification, the
Examiner finds the claimed invention to be patentably distinct from the prior art of
records.

        Lai (US 2005/0044197 A1) discloses a system and method for designing and
implementing Web Services, wherein the Service Providers need to deploy and manage
different versions of Web Services in a structured and manageable manner.   The
Service Registry may be used as an administration tool to centralize managing different
versions of Web Services deployment and may be supplemented by Web Services
network Service Providers that can route the client request to different versions of the
remote Web Services based on their profile **(Lai, paragraphs [0690] and [0697])**.

        Chalasani et al. (US 2004/0103195 A1) discloses an autonomic grid can include
a multiplicity of hosting services communicatively coupled to one another, wherein each
hosting service can include an administrative service to determine whether to deploy
requested web services locally or remotely; a code base for storing different
implementations/versions of the same web service, each version having a specific
optimization for particular hosting device configurations; and a deployment service to
deploy on command the implementations stored in the code base **(Chalasani, Abstract
and paragraph [0068])**.

Koeppel (US 2005/0015491 A1) discloses methods and systems for dynamically providing web services in a distributed system, wherein a distribution server uses a generic interface to invoke and one of a plurality of web services based on a user request at a client system and the distribution server is configured such that it dynamically and automatically determines any web services that a user may access and provides access to the authorized web services through the generic interface. Also, multiple versions of a web service are deployed to allow the developer to update one version of the same web service while the older version is in use **(Koeppel, Abstract and paragraph [0104])**.

Silva et al. (US 2002/0054090 A1) discloses a system and method for creating and providing personalized access to web content and services from terminals having diverse capabilities, wherein content providers create different versions of their Web sites that provide content that is formatted for specific devices **(Silva, paragraphs [0009-00010])**.

However, the prior art of records fail to teach or suggest, individually or in combination, that a computer system and method of managing a web service provided by a plurality of servers coupled to a data communication network, at least one of said servers executing a first version of the web service, said method comprising: executing a second version of the web service on a first server coupled to the data communication network, wherein the first server also includes the first version of the web service executed thereon; identifying a selected version of the web service based on a request from a user to access the web service via the data communication network; <u>generating</u>

a first data stream associated with the user in response to the request, said generated first data stream includes at least one of the following: default data and version data, said default data specifying a default version of the web service associated with the first server, said version data identifying a latest version of the web service accessed by the user, wherein the identifying the selected version of the web service comprises processing the first data stream, said processing the first data stream includes identifying the second version of the web service as the selected version if the version data identifies the second version as the latest version of the web service accessed by the user and the default data specifies the first version as the default version of the web service; and providing the user access to the identified selected version of the web service associated with the first server via a client also coupled to the data communication network as set forth in independent claims 1, 16, 30 and 44. Claims 1, 3, 4, 6, 8-16, 18, 19, 21, 23-30, 32, 33, 35, 37-44 and 46 are allowed because of the combination of other limitations and the limitations listed above.

8.   Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should clearly labeled "Comments on Examiner's Amendment".

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

        Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quang N. Nguyen/

Primary Examiner, Art Unit 2141